Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously presented) A bistable liquid crystal display device comprising:

two cell walls enclosing a layer of a composition comprising nematic liquid crystal material and finely divided solid particles dispersed therein, at least one of said cell walls being translucent;

at least one electrode on each of said cell walls for applying an electric field across at least some of said liquid crystal material;

a first surface alignment on an inner surface of one of said cell walls for inducing adjacent molecules of said liquid crystal material to adopt a first orientation, and a second surface alignment on an inner surface of the other of said cell walls for inducing adjacent molecules of said liquid crystal material to adopt a second orientation which is different from said first orientation;

said nematic liquid crystal material being arranged so it has a first stable molecular configuration in response to at a first unidirectional electric field of a first direction and suitable magnitude and duration being applied across said electrodes and a second stable molecular configuration in response to a second unidirectional electric field of a second direction and suitable magnitude and duration being applied across said electrodes, said second configuration being different from said first configuration the first and second directions being opposite to each other.

2. (Original) A device as claimed in claim 1, wherein said particles are capable of triboelectric charging.

3. (Original) A device as claimed in claim 1, wherein said particles are capable of acquiring charge in suspension in a liquid crystal material.

4. (Previously presented) A device as claimed in claim 1, further including drive electronics for applying the unidirectional electric fields to the electrodes.

5. (Original) A device as claimed in claim 1, wherein said particles have a size in the range 1 to 1000 nm.

6. (Original) A device as claimed in claim 1, wherein said particles have a size in the range 5 to 50 nm.

7. (Original) A device as claimed in claim 1, wherein said first surface alignment induces planar alignment and said second surface alignment induces homeotropic alignment.

8. (Original) A device as claimed in claim 1, wherein said surface alignments induce planar alignment at substantially 90° to each other.

9. (Original) A device as claimed in claim 1, wherein said particles comprise at least one material selected from the group comprising silica, alumina, clay, and titanium dioxide.

10. (Original) A device as claimed in claim 1, wherein said particles are silica particles.

11. (Original) A device as claimed in claim 1, wherein said particles are present in a concentration of from 0.1% to 25% by weight of said composition.

12. (Original) A device as claimed in claim 11, wherein said particles are present in a concentration of from 1 to 15% by weight of said composition.

13. (Original) A device as claimed in claim 11, wherein said particles are present in a concentration of from 1 to 5% by weight of said composition.

14. (Original) A device as claimed in claim 1, further comprising at least one polarizer for distinguishing between different optical states of said liquid crystal material.

15. (Original) A device as claimed in claim 1, wherein said liquid crystal has a pleochroic dye dissolved therein.

16. (Previously presented) A bistable liquid crystal display device comprising:

two cell walls enclosing a layer of nematic liquid crystal material, at least one of said cell walls being translucent;

said liquid crystal material having finely divided solid particles dispersed therein, said particles having sizes in the range 1 to 500 nm;

at least one electrode on each cell wall for applying an electric field across at least some of said liquid crystal material;

a first surface alignment on an inner surface of one cell wall for inducing adjacent molecules of said liquid crystal material to adopt a first orientation;

a second surface alignment on an inner surface of the other cell wall for inducing adjacent molecules of said liquid crystal material to adopt a second orientation;

a structure for distinguishing between different optical states of said liquid crystal material; and

drive electronics connected to said electrodes[[,]] for applying DC electric fields to said liquid crystal material, a first of the fields having a magnitude, a first direction and duration to cause the liquid crystal material to have a first stable optical state, a second of the fields having a

magnitude, second direction and duration to cause the liquid crystal material to have a second stable optical state, the first and second directions being opposite to each other, the first and second stable optical states differing from each other.

17. (Original) An electrophoretically-controlled bistable liquid crystal display device comprising:

a first cell wall and a second cell wall enclosing a layer of a composition comprising a nematic liquid crystal material having finely divided charged particles dispersed therein, at least one of said cell walls being translucent;

at least one electrode on each cell wall for applying an electric field across at least some of said liquid crystal material; and

a first surface alignment on an inner surface of said first cell wall for inducing adjacent molecules of said liquid crystal material to adopt a first orientation, and a second surface alignment on an inner surface of said second cell wall for inducing adjacent molecules of said liquid crystal material to adopt a second orientation which is different from said first orientation;

whereby said liquid crystal material can be switched to a first stable molecular configuration by the application of a DC electric field pulse of suitable field strength and duration to cause movement of charged particles to said first cell wall so as substantially to prevent said first surface alignment from influencing alignment of molecules of liquid crystal material in said layer; and

said liquid crystal material can be switched from said first configuration to a second stable molecular configuration by the application of a DC electric field pulse of suitable field strength and duration and opposite polarity so as to cause movement of sufficient charged particles away from said first cell wall to permit said first surface alignment to influence alignment of molecules of liquid crystal material in said layer.

18. (Original) A device as claimed in claim 17, wherein said particles have a size in the range 1 to 1000 nm.

19. (Original) A device as claimed in claim 17, wherein said particles have a size in the range 5 to 50 nm.

20. (Original) A device as claimed in claim 17, wherein said first surface alignment is arranged for inducing planar alignment and said second surface alignment is arranged for inducing homeotropic alignment.

21. (Original) A device as claimed in claim 17, wherein said surface alignments are arranged for inducing planar alignment at substantially 90° to each other.

22. (Original) A device as claimed in claim 17, wherein said particles comprise at least one material selected from the group comprising silica, alumina, clay, and titanium dioxide.

23. (Original) A device as claimed in claim 17, wherein said particles are silica particles.

24. (Original) A device as claimed in claim 17, wherein said particles are present in a concentration of from 0.1% to 25% by weight of said composition.

25. (Original) A device as claimed in claim 17, wherein said liquid crystal has a pleochroic dye dissolved therein.

26. (Original) An electrophoretically-controlled bistable liquid crystal display device comprising:

a first cell wall and a second cell wall enclosing a layer of nematic liquid crystal material, at least one of said cell walls being translucent;

said liquid crystal material having finely divided charged particles dispersed therein;

at least one electrode on each cell wall for applying an electric field across at least some of said liquid crystal material;

a first surface alignment on an inner surface of said first cell wall for inducing adjacent molecules of said liquid crystal material to adopt a first orientation, and a second surface alignment on an inner surface of said second cell wall for inducing adjacent molecules of said liquid crystal material to adopt a second orientation which has different optical properties from said first orientation; and

a structure for distinguishing between two different optical states;

wherein said liquid crystal material can be induced to adopt said first orientation by application of a DC pulse for causing at least some of said particles to migrate to said second surface alignment; and

wherein said liquid crystal material can be induced to adopt said second orientation by application of a DC pulse for causing at least some of said particles to migrate to said first surface alignment.

27. (Original) An electrophoretically-controlled bistable liquid crystal display device comprising:

a first cell wall and a second cell wall enclosing a layer of nematic liquid crystal material, at least one of said cell walls being translucent;

said liquid crystal material having finely divided charged particles dispersed therein;

at least one electrode on each cell wall for applying an electric field across at least some of said liquid crystal material; and

a first surface alignment on an inner surface of said first cell wall for inducing adjacent molecules of said liquid crystal material to adopt a planar alignment, and a second surface alignment on an inner surface of said second cell wall for inducing adjacent molecules of said liquid crystal material to adopt a homeotropic alignment;

whereby said liquid crystal material can be switched to a stable homeotropic alignment by the application of a DC electric field pulse of suitable field strength and duration to cause movement of charged particles to said first cell wall so as substantially to prevent said first surface alignment from influencing alignment of molecules of liquid crystal material in said layer; and

said liquid crystal material can be switched from said stable homeotropic alignment to a stable planar alignment by the application of a DC electric field pulse of suitable field strength and duration and opposite polarity so as to cause movement of sufficient charged particles away from said first cell wall to permit said first surface alignment to influence alignment of molecules of liquid crystal material in said layer.

28. (New) The device of claim 1 further including drive electronics for applying the electric fields to the electrodes, the electric fields and the cell walls being such that (a) the first surface alignment is always homeotropic while the electric fields are applied to the electrodes, and (b) the second surface alignment is planar in response the electric field extending in the first direction and switches to homeotropic in response the electric field switching from the first direction to the second direction.

29. (New) The device of claim 28 further including crossed polarizers, the cell walls being between the crossed polarizers; the drive electronics, the cell walls, the electrodes and the crossed polarizers being such that optical energy from outside the device and incident on one of the cell walls is prevent her from propagating through the device.

30. (New) The device of claim 16 wherein the drive electronics is arranged to cause the electric field lines to be such that (a) the first surface alignment is always homeotropic while the electric fields are applied to the electrodes, and (b) the second surface alignment is planar in response the electric field extending in the first direction and switches to homeotropic in response the electric field switching from the first direction to the second direction.

31. (New) The device of claim 30 wherein the drive electronics is arranged to cause the electric field lines to be such that (a) the first surface alignment is always homeotropic while the electric fields are applied to the electrodes, and (b) the second surface alignment is planar in response the electric field extending in the first direction and switches to homeotropic in response the electric field switching from the first direction to the second direction.